It was interesting to speculate on how long the kites had been in the area; perhaps the roost was just a transitory migrant assembly. Whatever the answer, it would have been interesting to know how far the kites dispersed to feed and why they approached the roost at such a height. Three days later, on 12 and 13 March, in Meru National Park, we had seven and 15 sightings of Swallow-tailed Kites respectively; clearly there were many more in this part of Kenya than is usual. The whole experience was quite spectacular.

John Mather, John Cudworth, and Graham T. Foggitt, Eagle Lodge, Aspintome, Knaresborough, North Yorkshire, HG5 8EP, England

Scopus 18: 123-124, December 1994

Received 22 October 1994

## The Angola Swallow *Hirundo angolensis* nesting in the Impenetrable Forest, Uganda

The Angola Swallow *Hirundo angolensis* is a common species in open areas around and within the Bwindi-Impenetrable Forest National Park, southwest Uganda. From September 1986 through August 1987 I monitored all nests of *H. angolensis* on three buildings at the Ruhizha Forest Station (1°02S, 29°46E) of the then Impenetrable Forest Reserve. Ruhizha is at 2300 m a.s.l. and receives an annual rainfall of about 144 cm (range 113–239 cm). The station is surrounded by montane forest but an extensive region of intensively cultivated land lies off the northern boundary about 1 km away. The climate, vegetation and fauna of this area are described by Butynski (1984).

Twenty-one nests were monitored. All nests were constructed of mud and grass plastered on to the walls of the buildings 3.5–6 m above the ground. All were located under eaves and, therefore, well protected from rain, wind and predators. The greatest distance between any two nests was about 30 m. During the nesting period, the usually rather silent adult birds became noisy, giving loud chirps and twitters. This was particularly noticeable at first light (c. 06:30).

The nests and eggs were as described by Chapin (1953), Mackworth-Praed & Grant (1960) and Keith *et al.* (1992). That is, the nests were made of mud and grass, cupshaped, and lined with grass and feathers. The eggs were white, blotched with dark rufous/rusty brown.

The mean number of eggs in 21 clutches under incubation was 2.76. This is probably an underestimate as some eggs may have been lost prior to the start of incubation. In the nine nests monitored prior to laying and up to the start of incubation, the mean number of eggs/clutch was 2.89. All nests had two to three eggs, with three eggs being the norm. Eggs were usually laid on consecutive days and incubation began soon after the last egg was laid.

The number of nestlings hatching in 20 nests was 40. This gives a mean of 2.00 nestlings/nest. Thus, about 69 per cent of the eggs laid hatched. One nest with three

eggs was excluded from this analysis as it was built in a cookhouse and probably failed because of the extremely smoky conditions.

Seventeen nests were observed until the nestlings either died or fledged. Four of the 17 nests did not fledge any young. Mean number of young fledged per nest was 1.80. Thus, approximately 62 percent of the eggs laid, and 90 percent of the eggs hatched, resulted in fledged young.

The incubation period for seven nests was 17-18 d. Nestlings are in the nest for 22-27 d (n = 11 nests, mean = 23 d). The entire nesting period, from the start of laying through fledging, ranged from 42-48 days with a mean of about 43 d.

Most of the nests at Ruhizha were used three times during this one-year study. The birds were not banded so it is uncertain whether the same individuals made three nesting attempts, but this was presumably the case. There was considerable synchrony among nesting *H. angolensis* at Ruhizha. The seven nests monitored during the first nesting hatched chicks between 22 October and 3 November (median 28 October, middle of the short wet season). Second nesting, three nests, 30 December–4 January (median 1 January, start of the short dry season). Third nesting, six nests, 2–13 August (median 7 August, middle of the long dry season). There were 65 d between the first and second hatchings and 219 d between the second and third hatchings. No nests were active during the intervening periods.

There was almost no rain from mid-June through mid-August 1987. Breeding at this time, and under these conditions, is at odds with Brown & Britton (1980) (56 records) who state that "Breeding is virtually confined to the rains when insect life is abundant and mud for nest-building is readily available."

The young flew extremely well upon leaving the nest for the first time. At least some of them, perhaps all, continued to return to the nest, or the immediate vicinity of the nest, to rest and sleep for at least 3 weeks after fledging. Keith *et al.* (1992) describe *H. angolensis* as a "Solitary nester, occasionally colonial." Given the numbers of pairs nesting within a 15-m radius, and the considerably synchrony of the nesting, I would say that the Ruhizha birds were nesting as a colony. It appears that this species will nest in colonies when a suitable number of nesting sites are available in close proximity. Pairs nesting alone can also be found in the Impenetrable Forest, however. For example, at Kitahurira there is a 10 m long bridge over the Ihihizo River (1500 m a.s.l.). One pair only was nesting under this bridge on 29 July 1991 and one adult with three fledglings were found near the bridge on 1 November 1991. Other adults were not seen.

## References

Britton, P.L. (ED) 1980. Birds of East Africa. Nairobi: EANHS.

Brown, L.H. & Britton, P.L. 1980. The breeding seasons of East African Birds. Nairobi: EANHS.

BUTYNSKI, T.M. 1984. Ecological survey of the Impenetrable (Bwindi) Forest, Uganda, and recommendations for its conservation and management. Unpubl. report to the Uganda Government. Wildlife Conservation International, New York.

Chapin, J.P. 1953. The birds of the Belgian Congo. Part 3. *Bulletin of the American Museum of Natural History*. 75A: 1-821.

KEITH, S., URBAN, E.K. & FRY, C.H. (EDS) 1992. The birds of Africa. vol IV. London: Academic Press.

MACKWORTH-PRAED, C.W. & GRANT, C.H.B. 1960. African handbook of birds Series I, Volume II; Birds of eastern and north eastern Africa. 2nd Edition. London: Longmans, Green & Co.

Dr Thomas M. Butynski, Zoo Atlanta/National Museums of Kenya, Box 24434, Nairobi, Kenya

Scopus 18: 124-126, December 1994

Received 12 December 1994

## Is the Blue Cuckoo Shrike Coracina azurea in East Africa?

Keith *et al.* (1992) refer to the Blue Cuckoo Shrike *Coracina azurea* as "truly unmistakable... not only unlike any other cuckoo-shrike but unlike any other forest bird in Africa." This applies to both sexes when seen well. The sole evidence for this lowland forest species in East Africa is an extralimital site record made sometime in the late 1970s in the Mafuga Forest Reserve (1°03'S, 29°52'E), southwestern Uganda (Britton 1980, Keith *et al.* 1992). Unfortunately, Britton (1980) does not provide any details surrounding this record or give the name of the person who actually made the sighting. The purpose of this note is to question whether *C. azurea* should continue to be listed as an East African species.

*C. azurea* is a bird of the canopy of primary and secondary lowland forests. In eastern Zaïre it has not been observed above 1190 m a.s.l. (Chapin 1953, Keith *et al.* 1992). Except for the Mafuga Forest sighting, it is not known to range farther east than the Semliki Forest of eastern Zaïre, or to be present in any of the other forests of the Albertine Rift Afromontane Region.

The Mafuga Forest (2000–2500 m a.s.l.) is roughly 100–200 km east of the normal range for *C. azurea*. It is the largest plantation of softwood/exotic trees in Uganda, covering an area of about 40 km2. The dominant species are *Pinus patula* and *Cupressus lusitanicus*. *Pinus radiata* and *Eucalyptus* spp. are also present. The only natural vegetation remaining is the secondary forest found in a few of the firebreaks and approximately 1 km2 of remnant forest which is variable, patchy in structure, and largely confined to the valley bottoms (Francis & Penford 1991, pers. observ.).

In 1991, Francis and Penford (1991, 1993) spent four days (58 observer hours) surveying the birds of Mafuga Forest. They recorded 85 species but did not see *C. azurea*. It should be noted, however, that they were unable to spend much time in natural vegetation types. Mafuga Forest lies only 4 km from the eastern edge of the Bwindi-Impenetrable Forest National Park (331 km²). These two forests were probably part of a much larger forest block until early this century (Butynski 1984). It is surprising that *C. azurea* would be present in the Mafuga Forest but absent from the nearby Impenetrable Forest with its much greater area and altitudinal range (1400–2600 m a.s.l.), and lower level of habitat disturbance. Dr Jan Kalina and I are familiar with *C. azurea* having observed it in the Ituri Forest, Zaïre. From 1984 through 1993